

In the Claims:

Please amend the claims as follows:

B2
(Amended) ^{1 28}~~40~~. A computer program product for detecting a crease that is displayed when [in an input] a color image of a document is rendered on an output device, said software product disposed on a computer readable medium comprising instructions for causing a computer to:

retrieve data corresponding to portions of the page that divides the page into sections; and for each one of the sections,

retrieve one-dimensional slices of pixels with a length equal to the width of the portion; and

determine for the slices of pixels whether the slices have intensity minima, by measuring a distance from the center of an assumed intensity minima out to a dominant background color for each of said slices.

B3
(Amended) ⁸~~45~~ ⁶~~43~~. The computer program product of claim ~~43~~ further comprising instructions to cause a computer to [the step of];

[assigning] assign a quality to each area of the page with the quality being equal to the width of the crease found or an invalid crease indicator if the area/crease fails to qualify as a crease

if there are less than $(NSLICES/2)+1$ valid slices, or the width is below a

B3
minimum crease width, or if the majority of centerpoints used to construct the average centerpoint are not within a constant horizontal distance of one another or if the vector of intensities appears concave.

B4
¹⁰~~47~~
(Amended) ⁴⁹. A computer program product for removing a crease depicted in an image of a document when the image is rendered on an output device, the crease dividing the image into an inside that includes the center of the image and an outside that does not include the center of the image, the computer program product being stored on a computer readable media, comprises instructions for causing a computer to:
set all pixels to the outside of [the] a center portion of [a left or right side] of the [image] crease to a dominant background color.

B5
¹¹~~48~~
(Amended) ⁵⁰. The computer program product of claim ¹⁰~~47~~⁴⁹ further comprising instructions for causing a computer to:
set all pixels within a [fixed] selected threshold distance to the dominant background color unless the width of the crease is less than a predetermined value; and
bleach all other pixels within the width of the crease between the center point and the near dominant background color point.

Please add new claims 53-60 as follows:

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~~53~~

A method for detecting a crease in an input color image of a document,
comprising:

retrieving data corresponding to portions of the image, the data dividing the
image into sections; and

for each section, retrieving one-dimensional slices of pixels with a length equal to
the width of the portion, and determining for the slices of pixels whether the slices have
intensity minima, by measuring a distance from the center of an assumed intensity
minima out to a dominant background color for each of said slices.

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The method of claim ~~53~~ wherein for any slices that contain no dominant
background color pixels in an appropriate direction, such slices are considered to be
invalid and are discarded.

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The method of claim ~~54~~ wherein for those slices that have a dominant
background color at an appropriate location, a center for the crease is determined by
averaging intensity at the centers of the slices.

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The method of claim ~~55~~ further comprising:

sorting a first average of the centers of all the valid slices by increasing distance
from the first average; and

recomputing averages using only the centers of the highest $(NSLICES/2)+1$,

where (NSLICES) is the number of slices.

¹⁹
~~57~~ 57. The method of claim ¹⁷~~56~~ wherein the whole area is considered to be invalid if there are less than $(NSLICES/2)+1$ valid slices.

¹⁹
~~56~~ 58. The method of claim ¹⁶~~55~~ further comprising:
assigning a composite width for the area crease as the minimum area slice width;
and
constructing a composite vector of intensities for each slice from the center point of the crease to the near dominant background color point for the slice.

²⁰
~~57~~ 59. The method of claim ¹⁹~~58~~ further comprising:
filling an array corresponding to the composite vector of intensities for each slice as follows:

for a "center" area;
defining slice(i) to be the pixel in a slice that is I number of pixels from the center in the direction of the near-DBC point; and
filling in the array;
array[i] = average of intensities of the slice[i]
pixels for the valid slices; and
iterating over i from the center out to the near-DBC point as: